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RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/016,157A

DATE: 08/07/2002 P.6
TIME: 11:29:43

Input Set : A:\DEX-0253.ST25.txt

Output Set: N:\CRF3\08072002\J016157A.raw

3 <110> APPLICANT: Sun, Yongming
 4 Recipon, Herve
 5 Ghosh, Malavika
 6 Liu, Chenghua
 8 <120> TITLE OF INVENTION: Compositions and Methods Relating to Colon Specific Genes
 and Proteins
 10 <130> FILE REFERENCE: DEX-0253
 12 <140> CURRENT APPLICATION NUMBER: US 10/016,157A
 13 <141> CURRENT FILING DATE: 2001-10-31
 15 <150> PRIOR APPLICATION NUMBER: US 60/244,717
 16 <151> PRIOR FILING DATE: 2000-10-31
 18 <160> NUMBER OF SEQ ID NOS: 250
 20 <170> SOFTWARE: PatentIn version 3.1
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 23 <211> LENGTH: 421
 24 <212> TYPE: DNA
 25 <213> ORGANISM: Homo sapiens
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 32 agtgaaagac cagataaatc ttttagttgg gaagtatgtc ttgaggtata cttccttata 180
 34 atcathtaagt aaataagtaa aactatatta catagataat gtgtaactct ctgtattaca 240
 36 tagaatgtct gcagaatgta gataggaaaa ataaagtttg tcaataattt tcaacatctt 300
 38 tattgagata cagttaatct gccatgacga tttgcctact ataaagtgta catttcagtg 360
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 46 <211> LENGTH: 426
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 48 <213> ORGANISM: Homo sapiens
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 57 atcttagcac ctgtctaaag gctgggtgac tgtatttata gataggaaa actgaaaatt 240
 59 gggggccaag gggcagtga gtgaagtga ttgttctatg atacacagct agtaggaata 300
 61 tttagcactgg aatttgaatt tcatgccatc ccattccaac ctgggtgttt actacttccc 360
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 65 tatttc 426
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 69 <211> LENGTH: 1016
 70 <212> TYPE: DNA
 71 <213> ORGANISM: Homo sapiens
 73 <220> FEATURE:

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88 gggggccaag gggcagtgaa gtgaagtgc ttgttctatg atacacagct agtaggaata 300
90 ttagcactgg aatttgaatt tcatgccatc ccattccaac cctgggtgtt tactacttcc 360
92 cactatctcc caagcatggg tatttttagga aatatagaac attttctcag caatacagac 420
W--> 94 ttattttctct atttcccttt ccacatactc tcttttccct taacaacann nnnnnnnnnn 480
W--> 96 nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn nnnnnnnnnn 540
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100 tgatgctttt tcattgatgc tctttataga catagtgaag taaaagttta tctaggatat 660
102 atgggtgggag gtgaggaaga cttaggtaga gaggttccaa accagttgtt actgcttagc 720
104 tcaatttcag acatacttcc tccagccctc tctaaactac ccaccagtct tcgcccctct 780
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108 agtcgaggtg agactagcat cgaaaggcac atcaacaaga aggagagacg tcggctacag 900
110 gccaaaggca gagtgaatg ggttgaaggc tcgggggtgg taggtgggta actgaacttg 960
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125 aaatctctct ctgtggctgt tgggccccag ggcagctgaa gaggggtgac agccctttgg 180
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131 cgagaagaac ttgcgtgtgc tgggggagag gaagcctggc cttgagggag ggggtgcagg 360
133 gtggctcctg tgtgtgtggg ggctggggga ccttgtgtgc cttttccttg tggctgtgaa 420
135 atgctttatg agtacttcca taggaggatg gacagggagt cggggagata aactcagcca 480
137 caaggcccca gggcctcagg aaacttgac ccaaccctct cattttacag aagaaaactg 540
139 tgccctggaag gttgaagggt ttgttcccag tcacacaacc agggatcctt aggacagcca 600
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157 ctcttaccgt cctctctctt cgtcagggct tcccaggaat caacaatgcc caagaaggaa 1140
159 gggattgtag aaatagctta accctttcat ttaccaacgt ggaaattgaa gccaggga 1200
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178 caaatatgtg tttattcctg catgctgtgg ccacaggctg gtttcttggg tgcaatgaat      180
180 agctgcagggt ttattagggg gtcttttttag atggatgtat gtttcccgat gtctatagaa      240
182 cactccggac cccggagagt gaagactctg cctgtcggac ttgctttgag aagatccttc      300
184 tccacctccc catggcagaa gttgcttcac agaggggaac agttttatgg atgtggctga      360
186 gaccttaaac ttgaggcaac ccactctgagg tggcatccag aggagactgg ctggcccctc      420
188 cttcaccttg gatgtagtgc tgtttctagg atctcttttc aatcagcaaa acaggggatg      480
190 ttccaagagg gtgtggatcc cctgccatcc cacatgggtca agtggagggg acgggaaaaa      540
192 gctatgaagg gtttgtgacc acacagactc tcctggcccc ctgtcctttt ggaaagaaga      600
194 cagggatgaa atataatcaa gcaattaacc acccccatca tcaccaagaa caacagtatc      660
196 aacaagaaga acagggacaa caaaaccac ggatgaaaca ttcttttctc agctcagatc      720
198 ttatctgttg cgttctctct ctgctctgtc ttggtgtgtg gtttagagaa acatggacaa      780
200 cgtgttttg aagaacagggt gagcgagggt ggggaatttc agaggcctgg gccaccgcc      840
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204 ttcttgttca aaggcctcag ccaccagct gtgtcccttt cccagaaaag caagggcaga      960
206 tggcagtggg tctgttgatg agagaacttt aagggcccaa tcagtccctg ggcacccct      1020
208 cctgggctcg ttttctccag gaggtgcat tctgatccat aaaccttctc ctgggggttt      1080
210 agggctcagc tgttcctgat gtttatcgga gactgggatc aaagctatcc aggtcataaa      1140
212 tctctctctg tggtgtttg gccccagggc agctgaagag ggttgacagc cctttggacc      1200
214 tcaaaggaaa aaatgtgctc tactccaccc actcccagct ctgccaagaa gctgtcctct      1260
216 gagaagccat ggctgggccc ttccattctg gggagctgct gaaaagagct gggaggccga      1320
218 gaagaacttg cgtgtgctgg gggagaggaa gcctggcctt gagggagggg tgcaggtgtg      1380
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222 ctttatgagt acttccatag gaggatggac agggagtctg ggagataaac tcagccacaa      1500
224 gggcccaggg cctcaggaaa cttgcaccca accctctcat ttacagaag aaaactgtgc      1560
226 ctggaagggt gaagggtttg ttcccagtc cacaaccagg gatccttagg acagccagac      1620
228 caggaaacca ttccaaaact gccaaagccat ggcagagtat caagacctca ggaaccatcg      1680
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234 tacccttgac aaagtcaagg ctgctggaca aaatgagtcc gaggatttca ggggcacgct      1860
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238 tgggtgatgg gggttcctca gcacaaaagt gaaggggtgg aggggctgga ggagcaggaa      1980
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250 ggattcccag gaagtccagc ccgagctgat tcacagaaca aatgcatgca aaccttgcta      2340
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Output Set: N:\CRF3\08072002\J016157A.raw

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283 ctttcacaaa tattgtccac cctaagtatg tttactataa tgtagctgt taaagacccc      180
285 tcctaccccc aaaccattta cccttcaata aaaatggtgc caagttgcaa gggtagaca      240
287 ggtatgtatt gaaatttaga aagtttgaat aattttotta acacaaaagc atttttttct      300
289 tattttctcat acttttgaat ctatttaaata acaacttcag tgctgattaa tctactaaat      360
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310 ctttttccttt cacaatatatt gtccacccta agtatgttta ctataatgtt agctgttaaa      180
312 gacccctcctt acccccaaac catttaccct tcaataaaaa tgggtgccaag ttgcaagggt      240
314 tagacaggta tgtattgaaa tttagaaagt ttgaataatt tctttaacac aaaagcattt      300
316 tttttcttatt tctcatactt ttgaatctat ttaaatacaa cttcagtgct gattaatcta      360
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331 ggaggagcag atgaatttta gctgtggtta tgtgtgctgt aaaagactat acgtgcttgt      180
333 attagtcaga atgagtacac cactaatttt tgatggttaa gagatttata ctaagctcat      240
335 catcagtttc tataattcag tgagataaaa ctgagtcaga ttgattttta ggtagcacat      300
337 gtagaaacag ctaattttat tcccctgatt tgatcctcat ctattgatta tataaactaa      360
339 agaagctaag aacaattaac ccttacgagg ttacacagtc aggagatgct gaactgagat      420
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349 tttttcttaa tctagaaagt cacttctgaa taattgcttg tttagatttt ctcatttggt 720
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366 acatggaaaa ttaagtcag aaaagctagg aagcttttct atcattttca attttctgca 180
368 aaaatacaga cataatcagg tttaggatct gcttgtgatg gataaattac atctgtaatt 240
370 ccttcttttc catattactg cattcagacg ataatttgct ttcagatata ttgctcatct 300
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374 tagtctttgc ctttttgggt gttgatagac tagtggtgat tataagcttt cgagcttctg 420
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408 aagataaagc ttggaattga ggtaaaggca tcagataagg aagtgatcat ttcataactt 1440
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416 <211> LENGTH: 283
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425 ttttatgttt tatttcagct tttaaaaaga ttttcatgat tcatgattgt tgtaaagcag 180
427 gactaggctg tatgtacata tttgaaatga aagtttcaca aaacatcatt tacctttact 240
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432 <210> SEQ ID NO: 11
433 <211> LENGTH: 736

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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/07/2002
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:64; N Pos. 411
Seq#:69; N Pos. 309,310,311,312,313,314,315,316,317,318,319,320,321,322,323
Seq#:69; N Pos. 324,325,326,327,328,329,330,331,332,333,334,335,336,337,338
Seq#:69; N Pos. 339,340,341,342,343,344,345,346,347,348,349,350,351,352,353
Seq#:69; N Pos. 354,355,356,357,358,359,360,361,362,363,364,365,366,367,368
Seq#:69; N Pos. 369,370,371,372,373,374,375,376,377,378,379,380,381,382,383
Seq#:69; N Pos. 384,385,386,387,388,389,390,391,392,393,394,395,396,397,398
Seq#:69; N Pos. 399,400,401,402,403,404,405,406,407,408,409,410,411,412,413
Seq#:69; N Pos. 414,415,416,417,418,419,420,421,422,423,424,425,426,427,428
Seq#:69; N Pos. 429,430,431,432,433,434,435,436,437,438,439,440,441,442,443
Seq#:69; N Pos. 444,445,446,447,448,449,450,451,452,453,454,455,456,457,458
Seq#:69; N Pos. 459,460,461,462,463,464,465,466,467,468,469,470,471,472,473
Seq#:69; N Pos. 474,475,476,477,478,479,480,481,482

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Seq#:71; N Pos. 7153
Seq#:74; N Pos. 85
Seq#:83; N Pos. 354,355,356,357,358,359,360,361,362,363,364,365,366,367,368
Seq#:83; N Pos. 369,370,371,372,373,374,375,376,377,378,379,380,381,382,383
Seq#:83; N Pos. 384,385,386,387,388,389,390,391,392,393,394,395,396,397,398
Seq#:83; N Pos. 399,400,401,402,403,404,405,406,407,408,409,410,411,412,413
Seq#:83; N Pos. 414,415,416,417,418,419,420,421,422,423,424,425,426,427,428
Seq#:83; N Pos. 429,430,431,432,433,434,435,436,437,438,439,440,441,442,443
Seq#:83; N Pos. 444,445,446,447,448,449,450,451,452,453,454,455,456,457,458
Seq#:83; N Pos. 459,460,461,462,463,464,465,466,467,468,469,470,471,472,473
Seq#:83; N Pos. 474,475,476,477,478,479,480,481,482,483,484,485,486,487,488
Seq#:83; N Pos. 489,490,491,492,493,494,495,496,497,498,499,500,501,502,503
Seq#:83; N Pos. 504,505,506,507,508,509,510,511,512,513,514,515,516,517,518
Seq#:83; N Pos. 519,520,521,522,523,524,525,526,527,528,529,530,531,532,533
Seq#:83; N Pos. 534,535,536,537,538,539,540,541,542,543,544,545,546,547,548
Seq#:83; N Pos. 549,550,551,552,553,554,555,556,557,558,559,560,561,562,563
Seq#:83; N Pos. 564,565
Seq#:84; N Pos. 12
Seq#:87; N Pos. 1012,1013,1014,1015,1016,1017,1018,1019,1020,1021,1022,1023
Seq#:87; N Pos. 1024,1025,1026,1027,1028,1029,1030,1031,1032,1033,1034,1035
Seq#:87; N Pos. 1036,1037,1038,1039,1040,1041,1042,1043,1044,1045,1046,1047
Seq#:87; N Pos. 1048,1049,1050,1051,1052,1053,1054,1055,1056,1057,1058,1059
Seq#:87; N Pos. 1060,1061,1062,1063,1064,1065,1066,1067,1068,1069,1070,1071
Seq#:87; N Pos. 1072,1073,1074,1075,1076,1077,1078,1079,1080,1081,1082,1083
Seq#:87; N Pos. 1084,1085,1086,1087,1088,1089,1090,1091,1092,1093,1094,1095
Seq#:87; N Pos. 1096,1097,1098,1099,1100,1101,1102,1103,1104,1105,1106,1107
Seq#:87; N Pos. 1108,1109,1110,1111,1112,1113,1114,1115,1116,1117,1118,1119
Seq#:88; N Pos. 437
Seq#:91; N Pos. 406,411,412,421
Seq#:92; N Pos. 551,556,557,566
Seq#:93; N Pos. 297,298,299,300,301,302,303,304,305,306,307,308,309,310,311
Seq#:93; N Pos. 312,313,314,315,316,317,318,319,320,321,322,323,324,325,326
Seq#:93; N Pos. 327,328,329,330,331,332,333,334,335,336,337,338,339,340,341
Seq#:93; N Pos. 342,343,344,345,346,347,348,349,350,351,352,353,354,355,356
Seq#:93; N Pos. 357,358,359,360,361,362,363,364,365,366,367,368,369,370,371
Seq#:93; N Pos. 372,373,374,375,376,377,378,379,380,381,382,383,384,385,386
Seq#:93; N Pos. 387,388,389,390,391,392,393,394,395,396,397,398,399,400,401
Seq#:93; N Pos. 402,403,404,405,406,407,408,409,410,411,412,413,414,415,416
Seq#:93; N Pos. 417,418,419,420,421,422,423,424,425,426,427,428,429,430,431
Seq#:93; N Pos. 432,433,434,435,436,437,438,439,440,441,442,443,444,445,446
Seq#:93; N Pos. 447,448,449,450,451,452,453,454,455,456,457,458,459,460,461
Seq#:93; N Pos. 462,463,464,465,466,467,468,469,470,471,472,473,474,475,476
Seq#:93; N Pos. 477,478,479,480,481,482,483,484,485,486,487,488,489,490,491
Seq#:93; N Pos. 492,493,494,495,496,497,498,499,500,501,502,503,504,505,506
Seq#:93; N Pos. 507,508,509,510,511,512,513,514,515,516,517,518,519,520,521
Seq#:93; N Pos. 522,523,524,525,526,527,528,529,530,531,532,533,534,535,536
Seq#:93; N Pos. 537,538,539,540,541,542,543,544,545,546,547,548,549,550,551
Seq#:93; N Pos. 552,553,554,555,556,557,558,559,560,561,562,563,564,565,566
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Seq#:93; N Pos. 582,583,584,585,586,587,588,589,590,591,592,593,594,595,596
Seq#:93; N Pos. 597,598,599,600,601,602
Seq#:95; N Pos. 480
Seq#:97; N Pos. 326,331,337,371
Seq#:99; N Pos. 338,339,340,341,342,343,344,345,346,347,348,349,350,351,352
Seq#:99; N Pos. 353,354,355,356,357,358,359,360,361,362,363,364,365,366,367
Seq#:99; N Pos. 368,369,370,371,372,373,374,375,376,377,378,379,380,381,382
Seq#:99; N Pos. 383,384,385,386,387,388,389,390,391,392,393,394,395,396,397
Seq#:99; N Pos. 398,399,400,401,402,403,404,405,406,407,408,409,410,411,412
Seq#:99; N Pos. 413,414,415,416,417,418,419,420,421,422,423,424,425,426,427
Seq#:99; N Pos. 428,429,430,431,432,433,434,435,436,437,438,439,440,441,442
Seq#:99; N Pos. 443,444,445,446,447,448,449,450,451,452,453,454,455,456,457
Seq#:99; N Pos. 458,459,460,461,462,463,464,465,466,467,468,469,470,471,472
Seq#:99; N Pos. 473,474,475,476,477,478,479,480,481,482,483,484,485,486,487
Seq#:99; N Pos. 488,489,490,491,492,493,494,495,496,497,498,499,500,501,502
Seq#:99; N Pos. 503,504,505,506,507,508,509,510,511,512,513,514,515,516,517
Seq#:99; N Pos. 518,519,520,521,522,523,524,525,526,527,528
Seq#:100; N Pos. 48
Seq#:102; N Pos. 603
Seq#:103; N Pos. 96,140
Seq#:106; N Pos. 357,367,391,407,410,430
Seq#:107; N Pos. 466
Seq#:108; N Pos. 824
Seq#:115; N Pos. 428
Seq#:122; N Pos. 74,75,76,77,78,79,80,81,82,83,84,85,86,87,88,89,90,91,92
Seq#:122; N Pos. 93,94,95,96,97,98,99,100,101,102,103,104,105,106,107,108
Seq#:122; N Pos. 109,110,111,112,113,114,115,116,117,118,119,120,121,122
Seq#:122; N Pos. 123,124,125,126,127,128,129,130,131,132,133,134,135,136
Seq#:122; N Pos. 137,138,139,140,141,142,143,144,145,146,147,148,149,150
Seq#:122; N Pos. 151,152,153,154,155,156,157,158,159,160,161,162,163,164
Seq#:122; N Pos. 165,166,167,168,169,170,171,172,173,174,175,176,177,178
Seq#:122; N Pos. 179,180,181,182,183,184,185,186,187,188,189,190,191,192
Seq#:122; N Pos. 193,194,195,196,197,198,199,200,201,202,203,204,205,206
Seq#:122; N Pos. 207,208,209,210,211,212,213,214,215,216,217,218,219,220
Seq#:122; N Pos. 221,222,223,224,225,226,227,228,229,230,231,232,233,234
Seq#:122; N Pos. 235,236,237,238,239,240,241,242,243,244,245,246,247,248
Seq#:122; N Pos. 249,250,251,252,253,254,255,256,257,258,259,260,261,262
Seq#:122; N Pos. 263,264,265,266,267,268,269,270,271,272,273,274,275,276
Seq#:122; N Pos. 277,278,279,280,281,282,283,284,285,286,287,288,289,290
Seq#:122; N Pos. 291,292,293,294
Seq#:128; N Pos. 101,102,103,104,105,106,107,108,109,110,111,112,113,114
Seq#:128; N Pos. 115,116,117,118,119,120,121,122,123,124,125,126,127,128
Seq#:128; N Pos. 129,130,131,132,133,134,135,136,137,138,139,140,141,142
Seq#:128; N Pos. 143,144,145,146,147,148,149,150,151,152,153,154,155,156
Seq#:128; N Pos. 157,158,159,160,161,162,163,164,165,166,167,168,169,170
Seq#:128; N Pos. 171,172,173,174,175,176,177,178,179,180,181,182,183,184
Seq#:128; N Pos. 185,186,187,188,189,190,191,192,193,194,195,196,197,198
Seq#:128; N Pos. 199,200,201,202,203,204,205,206,207,208,209,210,211,212
Seq#:128; N Pos. 213,214,215,216,217,218,219,220,221,222,223,224,225,226

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Seq#:128; N Pos. 227,228,229,230,231,232,233,234,235,236,237,238,239,240
Seq#:128; N Pos. 241,242,243,244,245,246,247,248,249,250,251,252,253,254
Seq#:128; N Pos. 255,256,257,258,259,260,261,262,263,264,265,266,267,268
Seq#:128; N Pos. 269,270,271,272,273,274,275,276,277,278,279,280,281,282
Seq#:128; N Pos. 283,284,285,286,287,288,289,290,291,292,293,294,295,296
Seq#:128; N Pos. 297,298,299,300,301,302,303,304,305,306,307,308,309,310
Seq#:128; N Pos. 311,312,313,314,315,316,317,318,319,320,321,322,323,324
Seq#:128; N Pos. 325,326,327,328,329,330,331,332,333,334,335,336,337,338
Seq#:128; N Pos. 339,340,341,342,343,344,345,346,347,348,349,350,351,352
Seq#:128; N Pos. 353,354,355,356,357,358,359,360,361,362,363,364,365,366
Seq#:128; N Pos. 367,368,369,370,371,372,373,374,375,376,377,378,379,380
Seq#:128; N Pos. 381,382,383,384,385,386,387,388,389,390,391,392,393,394
Seq#:128; N Pos. 395,396,397,398,399,400,401,402,403
Seq#:131; N Pos. 217,218,219,220,221,222,223,224,225,226,227,228,229,230
Seq#:131; N Pos. 231,232,233,234,235,236,237,238,239,240,241,242,243,244
Seq#:131; N Pos. 245,246,247,248,249,250,251,252,253,254,255,256,257,258
Seq#:131; N Pos. 259,260,261,262,263,264,265,266,267,268,269,270,271,272
Seq#:131; N Pos. 273
Seq#:132; N Pos. 874,879,885,887,890,894,896,899,921,924,926,931,933,944
Seq#:132; N Pos. 950,975,977,988,993,995,1007,1013,1030,1037,1050,1061
Seq#:133; N Pos. 295
Seq#:141; N Pos. 319,497
Seq#:143; N Pos. 289
Seq#:146; N Pos. 371,391,406,427
Seq#:152; Xaa Pos. 14,21
Seq#:158; Xaa Pos. 41,57
Seq#:209; Xaa Pos. 80
Seq#:215; Xaa Pos. 46
Seq#:216; Xaa Pos. 6,8
Seq#:220; Xaa Pos. 17
Seq#:224; Xaa Pos. 3,11,14
Seq#:241; Xaa Pos. 6,7,9,13,23,27,28,29,30,31,38,39,40,43,45,47
Seq#:242; Xaa Pos. 53
Seq#:247; Xaa Pos. 38
Seq#:250; Xaa Pos. 6

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L:94 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:420
L:96 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:480
L:98 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3 after pos.:540
L:279 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:281 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:60
L:308 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:60
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:1320
L:688 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:240
L:690 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:300
L:694 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:420
L:696 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:480
L:702 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:660
L:704 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:720
L:706 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:780
L:1089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:120
L:1091 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:180
L:1093 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:240
L:1095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:300
L:2061 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:180
L:2069 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58 after pos.:420
L:2117 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:60 after pos.:300
L:2136 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:61 after pos.:120
L:2251 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:64 after pos.:360
L:2382 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:300
L:2384 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:360
L:2386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:420
L:2388 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:69 after pos.:480
L:2680 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:71 after pos.:7140
L:2815 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74 after pos.:60
L:3034 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:300
L:3036 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:360
L:3038 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:420
L:3040 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:480
L:3042 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83 after pos.:540
L:3069 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84 after pos.:0
L:3172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:960
L:3174 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:1020
L:3176 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87 after pos.:1080
L:3215 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:88 after pos.:420
L:3338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:360
L:3340 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:420
L:3385 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:540
L:3408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:240
L:3410 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:300
L:3412 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:360
L:3414 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:420
L:3416 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:480
L:3418 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:540

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L:3420 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:600

L:3480 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:420